

10/07/2009

Serial No. 10/805,736

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A medical device comprising:
 - a biocompatible, implantable structure;
 - a basecoat matrix, including a combination of rapamycin and 2-methoxyestradiol, in therapeutic dosages, incorporated in a first polymeric material, the first polymeric material comprising polyvinylidenefluoride-co-hexafluoropropylene, wherein the vinylidenefluoride is copolymerized with hexafluoropropylene in the weight ratio of 60 weight percent vinylidenefluoride to 40 weight percent hexafluoropropylene, the basecoat matrix being affixed to the surface of the implantable medical device; and
 - a topcoat, including a second polymeric material, the second polymeric material comprising poly (n-butylmethacrylate) affixed to the basecoat matrix for controlling the elution rate of the rapamycin and the 2-methoxyestradiol, the rapamycin and 2-methoxyestradiol potentiate each others anti-restenotic effect by downregulating both smooth muscle cell and immune cell proliferation by distinct mechanisms thereby creating a synergistic effect, the concentration of 2-methoxyestradiol being about 100 micro molar when the concentration of rapamycin being in the range from about 7 nano molar to about 50 nano molar.
2. (Original) The medical device according to claim 1, wherein the implantable structure comprises a stent.
3. (Original) The medical device according to claim 1, wherein the implantable structure comprises a stent-graft.
4. (Original) The medical device according to claim 1, wherein the implantable structure comprises an anastomosis device.

5. (Original) The medical device according to claim 1, wherein the second polymeric material is incompatible with the first polymeric material, thereby creating both a physical and chemical barrier to the elution of the rapamycin and the 2-methoxyestradiol.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)